INSTITUTE FOR TRADE AND TRANSPORTATION STUDIES

PROMOTING REGIONAL AWARENESS FOR IMPROVING FREIGHT TRANSPORTATION

VOL 5 • ISSUE 5 • AUGUST 2013

NEWS UPDATE

- The ITTS Advisory Council met in Washington D.C. to review the ITTS work plan. Most of the morning was spent with states outlining their current freight planning efforts, followed by a working lunch discussion on how to communicate "freight projects" to stakeholders. ITTS discussed next steps in reviewing the LATTS Strategic network.

- ITTS also participated in the AASHTO-FHWA Freight Partnership Meeting. I spoke on freight data and MAP-21 (my presentation is posted on the ITTS website). With MAP-21, such discussions remain timely, especially as freight projects are gaining traction in the national discussion on improving transportation. One final note: Leo Penne will be retiring from AASHTO at the end of August. His insights and energy will be missed.

- I also participated in the Gulf Intercoastal Canal Association annual meeting in New Orleans, where I took part in a panel about the economics of waterway closures. My main point was that we can analyze system closures, but we need to be certain we can provide the correct information on an ongoing basis and not merely in response to events.

- Finally, ITTS is working with Florida DOT to organize the next "Freight in the Southeast" Conference in March 2014. More details to follow.

INSIDE THIS ISSUE

VISIT THE ITTS BLOG AT
http://www.ittsresearch.org/blog/

Maritime Trade Contributes to Every State's Economy

There always remains a question of the value of international trade, especially through maritime ports, to the United States. Contemplating this question led to a recent ITTS working paper on ports and the economy. The paper focuses on the national and state benefits that derive from international trade through U.S. ports and the relationship of ports to inland markets. Tables reflecting each state's top import and export commodities and international trading partners by vessel movement for 2012 are also included.

Frequently, the discussion on global markets, connectivity, and job growth takes place without the recognition that international trade in goods involves a physical shipment of a product. In 2012, international trade in goods accounted for 24% of the U.S. economy, as food, fuels, minerals, manufactured items, textiles, etc., flowed into and out of the United States. International trade is obviously a critical component of the U.S. economy, not just for coastal states, but for all states. Nationwide, maritime facilities accounted for 46% of trade based on value, making maritime trade the predominant mode for most businesses engaging in international trade, especially outside of the Canadian and Mexican (North American Free Trade Agreement) markets.

International traffic through a maritime port accounted for 11% of the nation's GDP. For states without coastal port facilities, the estimated economic share of maritime trade was lower than the national average. For states in the Mountain West, this ranged from 1% to 4%. For most inland states, international trade through ports accounted for 5% to 10% of their economies. The true contribution could be higher, since the nature of international shipments and global supply chains may negatively skew the value of maritime trade to these inland states. The role of ports

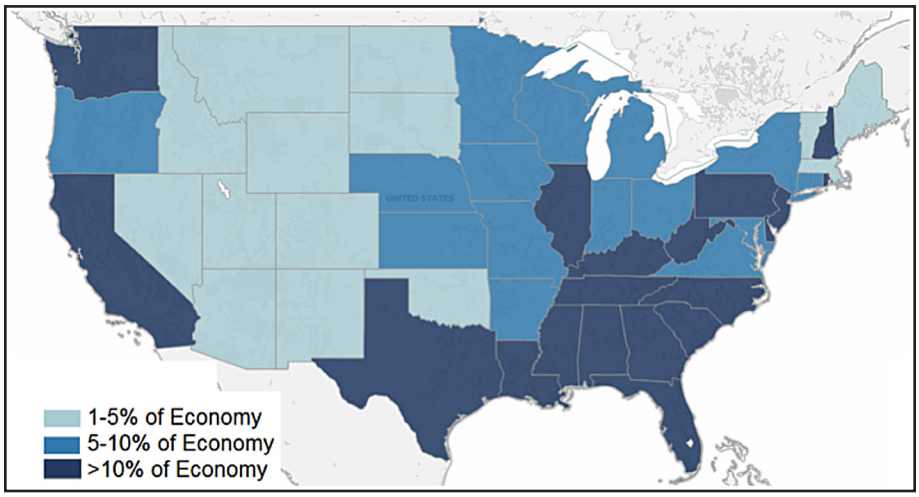


Figure 1. Share of state GDP dependent on international maritime trade.

continued on page 4

Institute for Trade and Transportation Studies

Bruce Lambert
Executive Director

10 Veterans Boulevard
New Orleans, LA 70124
Phone: 540-483-8536
bruce@ittsresearch.org

The Institute for Trade and Transportation Studies provides research data and expert opinions to its members concerning the effects of commercial freight movements on domestic and international activities, with reference to infrastructure and transportation needs, and safety implications.

The ITTS members include the:

Arkansas State Highway and Transportation Department

Florida Department of Transportation

Georgia Department of Transportation

Kentucky Transportation Cabinet

Louisiana Department of Transportation and Development

Mississippi Department of Transportation

Virginia Department of Transportation

West Virginia Department of Transportation

Please share this newsletter with your friends and coworkers.

The ITTS Newsletter is a free publication.
To subscribe, please visit *www.ittsresearch.org*

▶LAMBERT'S LAGNIAPPE

la•gniappe | lan'yap | : something given as a bonus or extra gift.

At the ITTS work plan meeting, someone said that "statistics are like a lamppost for the drunk, used for support, not illumination." As a data junkie, I may disagree, but there is a hint of truth in the critique. We all rely on data, even if used incorrectly, to defend our positions. This apparent analytical gap is evident when considering freight projects. Every study requires some information, but using freight data remains a very complicated and messy affair. Data are expensive, often out of date, and compiled in a format that is not readily accessible to the researcher. Further, reporting and quality control problems may additionally complicate any analysis. At the same time, the people who may know the information, such as private sector operators, either do not have all the information or may be unwilling to share, arguing that such disclosures would be harmful to their ongoing business concerns.

However, the need to better understand freight movement is becoming critical in meeting federal transportation guidelines. The current highway bill "Moving Ahead for Progress in the 21st Century Act" (MAP-21) calls for many data-intensive efforts to understand freight shipments. These include the development of a national freight primary network; optional state freight plans; truck parking; truck size and weight studies; freight advisory councils; and freight performance measures. Each of these projects will require data and analysis, and although the approaches will vary greatly, they contribute to answering the same question: Can we align freight programs with broader state and national goals related to investment in capacity and operations while sustaining economic development?

The answer to this question is complicated by the fact that freight analysis does not fit neatly into one "box". For example, based on the Freight Analysis Framework, the largest trading partners of most of the SASHTO states are internal state flows and trade with neighboring SASHTO members. The irony is that most states that have high through traffic rates support their neighbor's economy! Thus, planning should recognize sharing freight information across state boundaries becomes critical, especially with regard to freight corridor and modal diversion studies.

No one would argue that America's transportation network doesn't require attention, but as report after report comes out criticizing the lack of action on infrastructure programs, we all may sound like the town drunk, reciting the same statistics to anyone who strolls by our lamppost. The ultimate statistic may not be the data, but how successful we are in transforming the dialogue into understanding and, eventually, action. ■

What is . . . Ton-Mile

Trying to find the correct metric to describe transportation is difficult: one is describing a physical movement tied to economic activity. If the focus is on value, one tends to reflect upon higher value cargos that may not necessarily have much weight, such as diamonds or electrical machinery. Focusing on weight tends to capture heavier products, such as fertilizers, coal, or steel that may not have high per unit values. These measures describe the physical attributes, but not necessarily the physical movement, of the cargo. Sometimes this is captured by reporting on mode, as different modes are assumed to work in different ways and with different cargos.

One could simply count the number of vehicles or containers, but these statistics only provide estimates of traffic through a given route. For example, highway planners may use Vehicle Miles Traveled to describe total system use without accounting for what is moving or where it is moving. The U.S. Corps of Engineers uses tons and system miles to refer to the total length of movement along a waterway. In both cases, these metrics describe system use but not necessarily enough to assist in planning efforts.

A ton-mile is simply a measure of system use tied to physical characteristics. If you are moving 80,000 tons one mile, you would likely put that in something fairly large to reduce costs. If you

Continued

are moving one ton 80,000 miles, you are likely to use a smaller conveyance. In both cases, the net ton-mile use was 80,000 ton miles, but the implications for transportation planning are much different if one knows the corresponding network densities.

For example, Table 1 from the 2007 Commodity Flow Survey provides a good overview of why different metrics can provide information on system usage.

For example, trucking accounts for 71% of the value of shipments and 70% of the tonnage, but only 40% of the ton-miles. The differences in ton-miles occurs from rail and water, as other modes specialize in hauling large, dense cargos greater distances (coal, grains or even intermodal traffic). In sum, the system needs many different types of modes, but using ton-miles in conjunction with other freight data provides more insights into system usage. ■

Mode of transportation	2007 Value		2007 Tons		2007 Ton-miles1		2007 Average miles per shipment
	(million $)	Percent	(thousands)	Percent	(millions)	Percent	
All modes	**11,684,872**	**100%**	**12,543,425**	**100%**	**3,344,658**	**100%**	**619**
Single modes	**9,539,037**	**82%**	**11,698,128**	**93%**	**2,894,251**	**87%**	**234**
Truck 2	8,335,789	71%	8,778,713	70%	1,342,104	40%	206
For-hire truck	4,955,700	42%	4,075,136	32%	1,055,646	32%	599
Private truck	3,380,090	29%	4,703,576	37%	286,457	9%	57
Rail	436,420	4%	1,861,307	15%	1,344,040	40%	728
Water	114,905	1%	403,639	3%	157,314	5%	520
Shallow draft	91,004	1%	343,307	3%	117,473	4%	144
Great Lakes	S	-	17,792	0%	6,887	0%	657
Deep draft	23,058	0%	42,540	0%	32,954	1%	923
Air (included truck and air)	252,276	2%	3,611	0%	4,510	0%	1,304
Pipeline [3]	399,646	3%	650,859	5%	S	-	S
Multiple modes	**1,866,723**	**16%**	**573,729**	**5%**	**416,642**	**12%**	**975**
Parcel, U.S.P.S. or courier	1,561,874	13%	33,900	0%	27,961	1%	975
Truck and rail	187,248	2%	225,589	2%	196,772	6%	1,007
Truck and water	58,389	0%	145,521	1%	98,396	3%	1,429
Rail and water	13,892	0%	54,878	0%	47,111	1%	1,928
Other multiple modes	45,320	0%	113,841	1%	46,402	1%	1,182
Other and unknown modes	**279,113**	**2%**	**271,567**	**2%**	**33,764**	**1%**	**116**

KEY: S = Estimate does not meet publication standards because of high sampling variability or poor response quality.

[1] Ton-mile estimates are based on estimated distances traveled along a modeled transportation network.

[2] "Truck" as a single mode includes any shipment that was made by private truck only, by for-hire truck only, or by a combination of private and for-hire truck.

[3] Estimates for pipeline exclude shipments of crude petroleum.

SOURCE: U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics and U.S. Department of Commerce, U.S. Census Bureau, 2007 Economic Census: Transportation Commodity Flow Survey, December 2009.

State Export Profiles

Many different summaries exist on the value of exports to a state, such as major markets, jobs, etc., but these do not necessarily account for the transportation assets necessary to make trade a reality. As such, ITTS developed state export brochures for each member state which highlights export markets, commodities, and the linkages to international gateways. Much of the data are already available for download at the ITTS website.

For example, in 2012, the eight ITTS member states exported $236 billion in goods, supporting over 776 thousand jobs in the region. Exporters used the nation's ports, airports, and land crossings, generating 51.5 billion ton-miles of traffic on the nation's roadways, waterways and railroads to reach these global markets.

These brochures are available as both single- and double-sided spreads to assist anyone who may be interested in printing out copies. They are intended merely as supplements to your existing freight promotion efforts. ■

ITTS CALENDAR

This list highlights upcoming conferences related to transportation that may be of interest to the ITTS member region. For any corrections or suggestions, please contact Bruce Lambert at bruce@ittsresearch.org.

ITTS speaking engagements

August 24-28, 2013
SASHTO Annual Meeting
Asheville, North Carolina

August 25-29, 2013
Ports 2013 Conference
Seattle, Washington

August 27-30, 2013
Tennessee-Tombigbee Waterway Development Opportunities Conference
Point Clear, Alabama

September 17-19, 2013
West Virgnia 2013 Planning Conference
Weirton, WV

September 22-25, 2013
AASHTO SCORT Annual Meeting
Columbus, OH

September 23-27, 2013
National Waterways Conference Annual Meeting
Savannah, GA

September 23-27, 2012
Smart Rivers 2013 Conference
Liège (Belgium)andMaastricht (The Netherlands)

October 1-3, 2013
Waterways Council, 10th Annual Waterways Symposium
Memphis, TN

October 2-4, 2013
2013 Propeller Club
Arlington, Virginia

October 21-22, 2013
Trucking Industry Mobility and Technology Coalition meeting
Orlando, FLorida

Oct. 13-17, 2013
102nd Annual AAPA Convention and Exposition
Orlando, FL

Oct 22-25, 2013
2013 AMPO Annual Conference
Portland, OR

October 17-21, 2013
AASHTO Annual Meeting
Denver, CO

November 6-8, 2013
Mississippi Water Resources Association Annual Conference
Vicksburg, MS

December 4-6, 2013
Commonwealth of Virginia Governor's Transportation Conference
Richmond, VA

January 12-16, 2014
TRB 93rd Annual Meeting
Washington, D.C.

Maritime Trade Contributes to Every State's Economy

Continued from page 1

is critical to economies in the southeastern U.S., where maritime trade accounts for over 10 percent of most state economies.

International trade will remain a critical, and growing, component of the U.S. economy, as highlighted by the National Export Initiative and the push for more trade agreements. Improving trade, including trade through the nation's maritime system and its linkages to inland markets, can provide economic opportunities to U.S. firms. However, as with most infrastructure in the United States, this "highway on-ramp" to global prosperity is in need of attention, as "potholes" can disrupt our transportation system and the economy. The nation's infrastructure requires constant and secure funding, not only for ports and their associated dredging and infrastructure needs, but also for the corridors that link ports with inland markets.

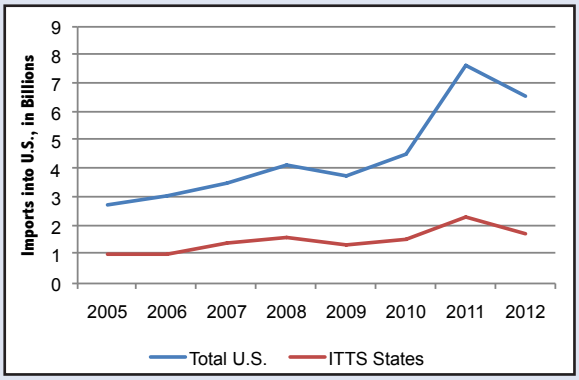
Key Points:

1. Every state in the U.S. depends upon maritime trade.
2. As trade grows, so too does the importance of ports to handle this trade, creating jobs in port areas.
3. The growth in ports also requires strong connections to inland markets to ensure that U.S. goods are competitively priced in world markets. This supports/creates jobs for many different industries and modes throughout the nation, just not in port areas.

The report is available on the ITTS website under "Reports". ■

TRADE PROFILE … Coffee

We are a nation of coffee drinkers, spending an estimated $30 billion on coffee. In 2012, the U.S. imported over $9 billion in coffee, mostly from developing countries. Hawaii is the only state in the nation that grows coffee, so unless you are drinking a Kona coffee, most likely your coffee came from a developing country. And coffee consumption, despite a drop in imports in 2012 from a record in 2011, is expected to increase in the near future.



For the U.S., the top five import countries for coffee are Brazil ($1.3 billion), Colombia ($902 million), Vietnam ($612 million), Guatemala ($565 million), and Mexico ($472 million).

Most coffee is shipped into the U.S. as beans and roasted domestically. Generally, coffee arrives by vessel, although some Mexican coffee may move across the border. In 2012, the top five ports for coffee shipments were New York ($1.26 billion), San Francisco ($910 million), New Orleans ($899 million), and Charleston ($490 million). On a personal note, I am a coffee fiend and do my best to make sure that New Orleans remains a top coffee port in the U.S.

So, when you have your next cup of coffee, simply reflect on the fact that it was transportation that made it possible. If you want to learn more about the coffee industry, visit the National Coffee Association website (ncausa.org). ■